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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,342	07/07/2003	David Scott Wishart	080586-2.00US	8720

20350 7590 12/08/2004

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EXAMINER	
WACHSMAN, HAL D	

ART UNIT	PAPER NUMBER
2857	

DATE MAILED: 12/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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10/615342

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.

EXAMINER	
ART UNIT	PAPER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Hal D Wachsman
Primary Examiner
Art Unit: 2857

Office Action Summary	Application No.	Applicant(s)	
	10/615,342	WISHART ET AL.	
	Examiner	Art Unit	
	Hal D Wachsman	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 September 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *65,66 and 68-77* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *65,69 and 74-77* is/are rejected.

7)☒ Claim(s) *66,68 and 70-73* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 10/416,988.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The amendment to page 1, paragraph 0001, of the specification, in the reply filed 9-20-04, is improper under 37 C.F.R. 1.121 because there is no mark-up to show the text that has been deleted from this paragraph ("NOT APPLICABLE" has been deleted). In addition, the statement of continuing data in this amendment does not provide the current status of U.S. application serial no. 10/416,988. Appropriate correction is required.

2. The amended Abstract in the reply filed 9-20-04 is improper under 37 C.F.R. 1.121 because it does not have the appropriate mark-ups to show all the changes made relative to the immediate prior version. If this amended Abstract was being submitted as a new or replacement Abstract that has been substantially rewritten, then it is improper under 37 C.F.R. 1.72 because it then must be submitted on a separate sheet. Appropriate correction is required.

3. The amended abstract of the disclosure in the reply filed 9-20-04 is also objected to because the Abstract refers to a "**reference** solution" however the specification as originally filed refers to a "*hypothetical* solution". Correction is required. See MPEP § 608.01(b).

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claims 65, 66 and 68-77, have been amended to refer now to a "**reference** solution" instead of a "*hypothetical* solution" however "reference solution" lacks clear antecedent basis in the specification.

5. Claims 69 and 74-77 are objected to under 37 C.F.R. 1.75(a) for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claim 69, line 3, cites "said record" however the antecedent basis is "pre-defined record". Claim 74, line 9, cites "for the reference solution. The base reference spectrum..." in which there is a period and the capitalization of "the" before the actual end of the claim. Claim 75, line 6, claim 76, lines 4-5 and claim 77, lines 8-9, all cite "the reference spectrum" which lacks clear antecedent basis. The examiner asks the applicant to better claim the limitations cited above. While the examiner understands the intentions of the applicant he feels confusion could be drawn from the limitations cited above. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 65 is rejected under 35 U.S.C. 102(b) as being anticipated by "Checking pH without an Electrode" (Sykes et al.).

As per claim 65, Sykes et al. (pages 479-11 and 479-12) disclose "producing a position value for at least one peak of the reference spectrum in response to a measured pH condition of the test sample....the base reference spectrum being

associated with a pH condition of the reference solution that is different from said measured pH condition".

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 74-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Checking pH without an Electrode" (Sykes et al.).

As per claim 74, Sykes et al. (pages 479-11 and 479-12) disclose a set of codes "..to produce a position value for at least one peak of the reference spectrum... The base reference spectrum being associated with a pH condition of the

reference solution that is different from said measured pH condition" but does not explicitly disclose the set of codes directing a processor circuit to accomplish this. However, as Sykes et al. (pages 479-12) disclose the use of Varian's VNMR processing software, it would have been obvious to a person of ordinary skill in the art at the time the invention was made that such a software could be run on a computer, the computer containing a microprocessor which is a processor circuit.

As per claim 75, Sykes et al. (pages 479-11 and 479-12) disclose a set of codes "..to produce a position value for at least one peak of the reference spectrum...the base reference spectrum being associated with a pH condition of the reference solution that is different from said measured pH condition" but does not explicitly disclose the set of codes directing a processor circuit with a signal segment comprising these codes to accomplish this. However, as Sykes et al. (pages 479-12) disclose the use of Varian's VNMR processing software, it would have been obvious to a person of ordinary skill in the art at the time the invention was made that such a software could be run on a computer, the computer containing a microprocessor which is a processor circuit and that signals can carry encoded instructions.

As per claim 76, Sykes et al. (pages 479-11 and 479-12) disclose a program "..to produce a position value for at least one peak of the reference spectrum...the base reference spectrum being associated with a pH condition of the reference solution that is different from said measured pH condition" but does not explicitly disclose a processor circuit programmed to accomplish this. However, as Sykes et al. (pages 479-12) disclose the use of Varian's VNMR processing software, it

would have been obvious to a person of ordinary skill in the art at the time the invention was made that such a software could be run on a computer, the computer containing a microprocessor which is a processor circuit.

As per claim 77, Sykes et al. (page 479-11) disclose receiving a measured pH condition value representing a pH condition of the test sample. Sykes et al. (page 479-11) disclose receiving a representation of a position value of at least one peak in a base reference spectrum for the reference solution. Sykes et al. (pages 479-11 and 479-12) disclose "producing a position value for at least one peak of the reference spectrum...the base reference spectrum being associated with a pH condition of the reference solution that is different from said measured pH condition". It appears though that Sykes et al. does not explicitly disclose though an apparatus with means for accomplishing what is cited above. However, as Sykes et al. (pages 479-12) disclose the use of Varian's VNMR processing software, it would have been obvious to a person of ordinary skill in the art at the time the invention was made that such a software could be run on a computer, the computer with the software means then constituting the apparatus needed to accomplish the above.

10. Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Checking pH without an Electrode" (Sykes et al.) in view of Otvos (5,343,389).

As per claim 69, Otvos (col. 3 lines 23-27, col. 6 lines 14-28, col. 9 lines 49-51, col. 11 lines 26-46, col. 13 lines 66-68, col. 14 lines 1-2, 7-9) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Otvos to the invention of Sykes

et al. as specified above because as taught by Otvos (col. 3 lines 23-27) by aligning the subclass reference spectra and the sample spectra to a control peak, the line shape analysis using the deconvolution process is rendered independent of environmental variables such as temperature and sample composition.

11. Claims 66, 68 and 70-73 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Applicant's arguments with respect to claims 65, 69 and 74-77 have been considered but are moot in view of the new ground(s) of rejection.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal D Wachsman whose telephone number is 571-272-2225. The examiner can normally be reached on Monday to Friday 7:00 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hal D Wachsman
Primary Examiner
Art Unit 2857

HW
December 2, 2004